

SECTION 07530

BALLASTED SINGLE PLY MEMBRANE ROOFING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Ethyl Propylene Dieneterpolymer (EPDM) Membrane formed into uniform, flexible sheets complying with ASTM D 4637, Type 1
 - 1. Class CR: Scrim or fabric reinforced.
 - 2. Thickness: .060
 - 3. Color: Black
- B. Sealants and adhesives.
- C. Insulation.
- D. Membrane flashing and edging.
- E. Manufacturer's 15-year warranty of water tightness.

1.2 SUBMITTALS

- A. Product Data: Provide characteristics on membrane materials, flashing materials, insulation, and copper gravel stops and counterflashing.

1.3 QUALITY ASSURANCE

- A. Perform work in accordance with UL 790 Underwriters Laboratories Inc. FM 4470 Factory Mutual Engineering Corporation – Roof assembly classification and wind uplift requirements.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Do not install membrane during inclement weather or when air temperature may fall below 40 degrees F.

1.5 WARRANTY

- A. Provide 15-year warranty including coverage of materials and installation.

PART 2 PRODUCTS

2.1 MEMBRANE MATERIALS

- A. Ballasted EPDM Membrane: Manufacturer's standard installation
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include but are not limited to, the following:
 - a. Firestone Building Products Co.
 - b. Manville Building Products Corp.
 - c. Carlisle Syntec Systems

2.2 AUXILIARY MATERIALS

- A. Sheet Seaming System: Manufacturer's standard materials for sealing lapped joints, including edge sealer to cover exposed spliced edges as recommended by the membrane manufacturer.
 - 1. Furnish liquid type auxiliary materials that meet VOC limits of authorities having jurisdiction.
- B. Flashing accessories: Type recommended by the membrane manufacturer, including adhesive tapes, flashing cements and sealants.
- C. Flashing Material: Manufacturer's standard 60-mil thick EPDM system compatible with single ply membrane.
- D. Slip sheet: Type recommended by the membrane manufacturer for protecting membrane from incompatible substrates.
- E. Spice Adhesive and Cleaner: Single component butyl splicing adhesive and solvent-based spice cleaner.
- F. Spice Primer and Tape: Manufacturer's standard synthetic rubber polymer primer and 3" wide minimum, butyl spice tape with release film.
- G. Lap Sealant: Manufacturer's standard single component system.
- H. Water Cutoff Mastic: Manufacturer's standard butyl mastic sealant.
- I. Expansion Joints: Manufacturer's standard expansion joint materials
- J. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashing, preformed inside and outside corner sheet flashing. T joint covers. In seam sealants, termination reglets, and other accessories recommended by the roofing system manufacturer.
- K. Reuse existing ballast to comply with membrane manufacturers recommendations.

2.3 INSULATION MATERIALS

- A. Manufacturers:
 - 1. NRG or approved equal
- B. Insulation: Kraft-faced isocyanurate 1" thick.

2.4 ACCESSORIES

- A. CCA Pressure Treated Wood or Fiber Cant Strip: As specified on plans.
- B. Roofing Nails or Screws: Galvanized or non-ferrous type.
- C. All nailers and fasteners to resist a force of 75 lbs. per square foot or as required by manufacturer.
- D. Sealants: As recommended by membrane manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work; deck is clean and smooth, free of snow or ice; properly sloped.
- B. Verify roof openings, curbs and protrusions through roof are solidly set and wood or fiber cant strips are in place.

3.2 PREPARATION

- A. Verify that existing insulation is dry and in acceptable condition. Coordinate removal and replacement of wet or otherwise unacceptable insulation with Project Engineer. Clean surface of existing insulation to be reused to prepare for installation of new 1" thick kraft faced insulation. Verify that all existing and new insulation are installed according to manufacturers recommendation prior to installing new membrane.

3.3 INSULATION APPLICATION (if applicable)

- A. Lay 1" layer of kraft faced insulation with joints staggered on existing insulation.
- B. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

3.4 MEMBRANE APPLICATION

- A. Roll out membrane. Work out air bubbles, wrinkles and fishmouths.
- B. Overlap edges and ends and seal watertight.
- C. Seal membrane to adjoining surfaces.
- D. Apply joint sealant.
- E. Seal items penetrating membrane with counterflashing membrane material. Install membrane flashings. Seal watertight to membrane.
- F. Reinstall ballast material to be reused.

END OF SECTION